

# Asynchronous Two-Handed Spinning

[https://web.archive.org/web/\\*/http://www.upsb.info/wiki/index.php?title=Asynchronous\\_Two-Handed\\_Spinning](https://web.archive.org/web/*/http://www.upsb.info/wiki/index.php?title=Asynchronous_Two-Handed_Spinning)

*(The wiki article wasn't archived)*

## UPSB v3

### Research Department Feedback / Asynchronous Two-Handed Spinning article released

<https://upsb-v3.spin-archive.org/topic/25569>

1. Zombo

Date: Mon, Apr 19 2010 19:48:58

A new article on asynchronous two-handed spinning has been released:

[http://www.upsb.info/wiki/index.php?title=...Handed\\_Spinning](http://www.upsb.info/wiki/index.php?title=...Handed_Spinning)

2. Platypusvictim

Date: Thu, Apr 22 2010 04:34:34

Awesome article Zombo, seeing this pop up in here makes me super excited, as this is something I've been thinking about alot recently. My idea was to basically apply polyrhythms to penspinning, specifically 2p2h. A few problems arise from this though, namely that 2p2h is pretty niche in terms of difficulty(meaning few will attempt this) and that I'm utterly terrible at spinning with my left hand, so it's hard to convey my conceptualizations. But nevertheless! I will outline my ideas here in hopes of someone somewhere getting something out of it:

First I'll start off by doing my best to explain what a polyrhythm even is. Essentially it's exactly what it sounds like: Multiple, independent rhythms sounding at the same time. It's difficult for the human brain to comprehend this at first, as it's creates an unnatural feeling, and like you said it appears very chaotic. For more info check out the [Wikipedia Article](#) for a more in depth explanation and some aural examples (which I'll be refering to later).

Similar to your concept of Asynchronous Spinning, each hand will be executing different tricks. My idea differs from yours though in that it implies an overarching relation between the rhythm and tempo of each hand. Each hand will mimic a separate rhythm or beat, and when the two are viewed simultaneously it should create the odd feeling of a polyrhythm. The difficulty in this (besides successful execution) lies in maintaning coherence in the

combo, and making sure that it looks like more than just a bunch of random tricks just done at different speeds. I have a few suggestions to avoid this:

1. 2 different, repeatable, mini-combos could be done in each hand, but at varying tempos. This would emphasize the polyrhythm, as it would be a visual representation of the moments where the combos would sync up or the entire rhythm would repeat itself. Skillfully inserting this into an entire combo would be pretty difficult though...
2. Actually spin alongside a song that contains a polyrhythm or polymeter (multiple time signatures being played at the same time), this could be a bit easier to do, as you would only have to sync each hand up to the different pulses being played. I.e. your weak hand could match up with the basic 4/4 groove, while your dominant hand would handle the more complex counter rhythm. (This also gives an excuse to penspin over some Meshuggah XP)
3. A single trick done polyrhythmically and repeatedly; That is, as the highlight of your combo, you could repeat a difficult trick in both hands, but at different speeds. For example, you could do multiple busts in each hand, but count 2 busts in your left hand against 3 in your right, or some other rhythmic division. (See "a 2 against 3 polyrhythm" here: [Wikipedia](#))

In the end, it'll take a creative thinker with the skill of one of the top spinners, and the mind and limb independency of a drummer to pull something like this off. But if anyone found my idea interesting, then I'd definitely recommend messing around with it a little. Even something as simple as two syncopated charges or a polyrhythmic TA harmonic can be really fun to do!

Also, it's amazing how much music theory can be applied to penspinning, if memory serves you were a pianist right Zombo? Can totally tell you were drawing from that when writing this article =P I'm still a novice when it comes to theory, so lemme know if my terminology is off or if something can be explained better.

### 3. [Zombo](#)

Date: Thu, Apr 22 2010 06:37:39

hi platy, long time no see, yes I am a pianist and I know my music theory

for #1, eriror said it was very difficult to spin at different tempos. that requires very good independence.

for #2, there is a simplification is possible if true polyrhythm is not possible. some music have what is called a "compound meter", where the same rhythm can be counted in different ways. Usually it involves both the triple and double metre. For example:

CODE

1 2 3 1 2 3 1 2 3 1 2 3

1 2 1 2

because the metres are different it feel desynchronized

for #3, ostinato is not the right word IMO because ostinato is a repeated element through a whole song (combo). What you propose is similar to #1 or to my bakfall 1.5 vs bak 1.0 idea where you create time by extending one hand's rotation. you can do for instance bakfall 2.0 vs double bakfall (bak 12 x2 > bak 23 x2 > bak 34 x2 > pinkybak x2)

4. [Kirby](#)

Date: Thu, Apr 22 2010 20:42:55

Really nice article

Sorry I didn't read the previous posts but I'd say this has the highest difficulty out of any spinning. Nothing seems as hard as this. Like dribbling two basketballs at once is kinda challenging, but doing asynchronously gets pretty difficult. Now as we now penspinning is much much harder than dribbling a basketball, so I feel that this concept is pretty amazing and extremely difficult.

5. [Platypusvictim](#)

Date: Fri, Apr 23 2010 03:52:41

Yay, Zombo remembers me

QUOTE

for #1, eriror said it was very difficult to spin at different tempos. that requires very good independence.

Which is exactly why I find this concept so amazing. Not only does it require being able to spin comfortably with your off hand, it demands the ability to think of each hand as independent from the other.

QUOTE

for #2, there is a simplification is possible if true polyrhythm is not possible. some music have what is called a "compound meter", where the same rhythm can be counted in different ways. Usually it involves both the triple and double metre. For example: (...)

That is definitely a much more realistic approach to this. It'd create the feeling of desynchronization, but would be much easier to pull off. Could get some really cool effects like that.

QUOTE

for #3, ostinato is not the right word IMO because ostinato is a repeated element through a whole song (combo).

Ah, I see. I thought an ostinato could be a repeated element for just a section of the song. For example, repeated dotted eighth notes during a bridge could be considered ostinato. Either

way, i changed the wording to be less confusing, thanks for the clarification.

Here's an example I thought of to better explain my idea:

To keep it simple, we're gonna be using only Thumbarounds (1.0) and Reverse Thumbarounds (1.0)

First off, we'll be using a pattern that applies a 3:2 polyrhythm. Meaning for every 3 tricks or rotations done in one hand, 2 will be done in the other. So that rhythm would look like this:

CODE

```
1 2 3 1 2 3 1 2 3 1 2 3 1
1 2 1 2 1 2 1 2 1
```

Now we just substitute what tricks we'll be using in place of each number. For now, a Thumbaround will be notated by a "T", and a reverse thumbaround will be an "R". So our pattern now looks like:

CODE

```
Hand 1 - T R T R T R T R T R T
Hand 2 - T R T R T R T R T
```

You'll notice that with this pattern, each time two tricks are synchronized, the pens rotate in a different direction than before. The first time two tricks happen concurrently, you're doing a TA and a TA, whereas the second time you end up with a Rev TA and a TA.

Continuing this polyrhythm, we could get a completely different feeling to the combo if we just do continous Thumbarounds in Hand 1, but keep the TA harmonics in hand 2.

CODE

```
Hand 1 - T T T T T T T T T T T
Hand 2 - T R T R T R T R T
```

So yes, in essence this is very similar to what you proposed in the article. But it differs slightly in that it you directly apply a polyrhythmic element/feel to the combo instead of say, doubling the rotations of one hand and doubling the times a trick is done in the other. This is entirely different than TA 1.5 Harmonics vs. TA 1.0 Harmonics. (which would probably be harder and look cooler too =/). I really like your explanation of this as "creating time by extending one hand's rotation." In this case, you're creating time by delaying the trick in Hand 2 by half a rotation in Hand 1. (3:2 can be simplified to 1.5:1)

6. [Zombo](#)

Date: Fri, Apr 23 2010 04:50:16

yes you're right I was saying that "an alternative" would be to change the rotations instead of the tempo.

now in rhythm there's another aspect to consider and it's the rhythmic accents. you can have two parts with the same tempo, but feel totally different because they put their accents on different beats. Some music can sound desynchronized if the different parts are not emphasizing the same accents.

now in pen spinning, assuming same tempo and same tricks, accents can be generated by hand or fingers motions or even the method or style of execution of a trick. can be tricky but if you look at your TAH example:

Hand 1 - T **R** T R T **R** T R T R T **R** T

Hand 2 - T R T R T R T R T R T R T

what's happening here? Hand 1 is counting "one TWO THREE one TWO THREE one TWO THREE" etc while Hand 2 is counting "ONE two ONE two ONE two"

and the emphasized tricks would be executed "bigger" with more hand motion or different style

7. [Nation](#)

Date: Fri, Apr 23 2010 23:10:39

I think that playing piano or another instrument will help a LOT with the mental part.

8. [XYZaki&fjAM](#)

Date: Sat, Apr 24 2010 03:24:24

But asynchronous means without the clock pulse D:

9. [Zombo](#)

Date: Sat, Apr 24 2010 03:59:19

QUOTE (XYZaki&fjAM @ Apr 23 2010, 11:24 PM)

But asynchronous means without the clock pulse D:

what

asynchronous means the opposite of synchronous.

10. [XYZaki](#)

Date: Thu, Apr 29 2010 22:56:38

QUOTE (Zombo @ Apr 23 2010, 08:59 PM)

asynchronous means the opposite of synchronous.

[http://en.wikipedia.org/wiki/Asynchronous\\_circuit](http://en.wikipedia.org/wiki/Asynchronous_circuit)

'Twas a reference.

11. [tidus](#)

Date: Sun, May 2 2010 08:18:38

Asynchronous combo by gold angel posted last year for battle against Lindor

<http://www.youtube.com/watch?v=i0Dc-vFOsvk>

12. [Zombo](#)

Date: Sun, May 2 2010 14:20:26

execution is not so good

but it has the right idea of starting synchronized then desynchronized during infinities and then resynchronize

13. [Resonance](#)

Date: Sun, May 2 2010 19:47:08

Just adding to the videos:

By Shadowserpant of course, not me.

14. [Zombo](#)

Date: Sun, May 2 2010 20:04:23

very nice looks like a canon because of the slight delay, not overly chaotic but it comes to clarity in the end

15. [tidus](#)

Date: Mon, May 3 2010 12:25:32

QUOTE (Zombo @ May 2 2010, 03:20 PM)

execution is not so good

but it has the right idea of starting synchronized then desynchronized during infinities and then resynchronize

He made this combo for Express ladder against lindor he had only 3 minutes to film

edit: New asynchronous combo by gold

<http://www.youtube.com/watch?v=4iKXJY5ZnHA>

And a old video from A13-X

<http://www.youtube.com/user/HVstyle#p/u/14/9dA79tsOyjc>